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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,026	12/01/2003	Yi He	12227-067001	2669
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FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			CHIAM, DINH D	
			ART UNIT	PAPER NUMBER
			2883	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/726,026

Applicant(s)

HE ET AL.

Examiner

Erin D. Chiem

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12/01/2003.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-9, and 13-24, drawn to an integrated fiber tap monitor with variable optical attenuator (VOA), classified in class 385, subclass 48.
  - II. Claims 10-12, drawn to the method of using the integrated fiber tap monitor with VOA, classified in class 385, subclass 48.
2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case (1) prior art reference; for example, Barker et al. (US 2002/016127 A1) teach method of using a fiber tap monitor employing optical combiner, splitters, demultiplexers, and attenuate the optical signal from an independent optical variable attenuator. Therefore, the method of using can be practiced with another device that is materially different product.
3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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5. Invention I contains the following patentably distinct species of the claimed invention:

- a. Species A, embodiment 1, Figure 3, drawn to a integrated fiber tap monitor with VOA comprising an input fiber to guide an input optical beam; a reflector having a reflective surface that is partially transmissive to light positioned to reflect part of the input optical beam at the reflective surface as a reflected optical beam and to transmit a part of the input optical beam as a transmitted optical beam; an output fiber positioned to receive and guide the reflected optical beam as an output optical beam; an optical detector positioned to receive the transmitted optical beam and to produce a detector output; and a VOA positioned in an optical path between said reflective surface and one of said input and said output fibers to attenuate light in response to a control signal; wherein the VOA is positioned to attenuate the input optical beam (page 3, line 20-22).
- b. Species B, embodiment 1, Figure 2, drawn to an integrated fiber tap monitor with VOA comprising all of the features mentioned above and wherein the VOA is positioned to attenuate the reflected optical beam (page 3, line 20-22).
- c. Species C, embodiment 1, drawn to an integrated fiber tap monitor with VOA comprising all of the features mentioned above and wherein the VOA attenuates light by scattering light.
- d. Species D, embodiment 1, drawn to an integrated fiber tap monitor with VOA comprising all of the features mentioned above and wherein the VOA attenuates light by reflecting light.

- e. Species E, embodiment 1, drawn to an integrated fiber tap monitor with VOA comprising all of the features mentioned above and wherein the VOA attenuates light by absorbing light.
- f. Species F, embodiment 2, drawn to an integrated fiber tap monitor comprising: a housing having a first end and a second opposing end; an optical detector engaged to the first end; a collimator lens having a flat end lens facet in the housing to face the optical detector and to transmit a fraction of light to the optical detector; a magnet in the housing to produce a magnetic field; a capillary body being in the housing to hold input and output fibers that exit the housing at the second opposing end and having an end facet facing the collimator lens to expose end facets of the input and output fibers to the collimator lens and to the magnetic field, wherein the collimator is configured and spaced from the end facet of the capillary body to collimate light from one fiber and to focus reflected light by the flat end lens facet to another fiber; a conductive wire movably fixed to the capillary body to have a wire portion across the end facet of the capillary body, the wire movable along the end facet when an electric current is supplied to the wire to interact with and the magnetic field; a shutter engaged to the wire portion and movable along with the wire to intercept a beam that is either output by the input fiber or received by the output fiber to attenuate the beam. The shutter attenuates the optical beam by scattering the beam when intercepting the beam (page 18, line 5-8).
- g. Species G, embodiment 2, drawn to an integrated fiber tap monitor comprising all of the above-mentioned features and wherein the shutter attenuates the optical beam by absorbing the beam when intercepting the beam (page 18, line 5-8).

- h. Species H, embodiment 2, drawn to an integrated fiber tap monitor comprising all of the above-mentioned features and wherein the shutter reflects the beam when intercepting the beam (page 18, line 5-8).
- i. Species I, embodiment 2, drawn to an integrated fiber tap monitor comprising all of the above-mentioned features and wherein the collimator lens is a GRIN lens (page 15, line 13).
- j. Species J, embodiment 2, drawn to an integrated fiber tap monitor comprising all of the above-mentioned features and wherein the collimator lens is a C lens (page 15, line 21).
- k. Species K, embodiment 2, Figure 5, drawn to an integrated fiber tap monitor comprising all of the above-mentioned features and wherein the reflector made of flat end lens facet is coated with a reflective coating that is partially transmissive (page 14, line 15-22).
- l. Species L, embodiment 2, Figure 5, drawn to an integrated fiber tap monitor comprising all of the above-mentioned features and wherein the reflector made of partially transmissive mirror engaged to the flat end lens (page 15, line 22 – page 16, line 8).
- 6. Invention II contains the following patentably distinct species of the claimed invention
  - m. Species M: the method of using the device is to attenuate the reflected beam (Claim 11).
  - n. Species N: the method of using the device is to attenuate the input beam (Claim 12).

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Applicant is required under 35 U.S.C. 121 to elect invention I or invention II. If Applicant elects invention I, Applicant is further required under 35 U.S.C. 121 to elect one species from each of A-B, C-E, F-H, I-J, and K-L. If Applicant elects invention II, Applicant is further required under 35 U.S.C. 121 to elect one species from each of M-N for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic to Invention I and claim 10 is generic to Invention II.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erin D. Chiem whose telephone number is (571) 272-3102. The examiner can normally be reached on Monday - Thursday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Erin D Chiem  
Examiner  
Art Unit 2883

Frank G. Font  
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